

## Hidden Oaks Nature Center Environmental Science Merit Badge

Pre-work required:

1. Make a time line of the history of environmental science in American identifying contributions made by the Boy Scouts of America to environmental science including dates, names of people or organizations and important events.
2. Write a 100-word report on one endangered species found in Virginia. Find out what its natural habitat is, why it is endangered, what is being done to preserve it and how many individual organisms are left in the wild. Include a drawing of the plant or animal. You may visit Hidden Oaks to look at a list of endangered animals in Virginia or you may go online to [www.endangeredspecies.com/states/va.htm](http://www.endangeredspecies.com/states/va.htm) -  
or  
write a 100-word report on a species that was endangered or threatened but has now recovered. Find out how the organism recovered and what its new status is. One option is to write about the American Bald Eagle.
3. Plan a construction project for a park from the following list:
  - A. a bridge across a stream,
  - B. a campfire site
  - C. a new trail connecting two existing trails

Identify the items that would need to be included in an environmental impact statement for your planned project. Include ideas for evaluating sensitive plants and animals as well as discuss

the impact on soil (erosion issues, compaction, grading, etc.) and how you would safely construct the project to be useful to all park patrons, including the physically-challenged. Does your project impact water quality, air, soil, water or noise pollution? How would you lessen these impacts?

4. Find out about three career opportunities in environmental science. Pick one and find out the education, training and experience required for this profession. Write a brief paragraph including this information as well as why this career would interest you. Some options include:

Arborist

Invasive plant manager

Bioengineer

Environmental engineering

Oceanographer

Volcanologist

Natural Resource Manager

Invasive Pest Manager

Environmental Protection Specialist (EPA)

Soil Scientist/Conservationist

Biologist

Rangeland Management Specialist

Environmental Researcher

Dress to be outside for at least one hour of the program and bring a lunch and a snack (no red liquids please.) With the completion of the pre-work, the badge will be completed during the one day session.

